


 <p>CARLO GAVAZZI</p> <p>CARLO GAVAZZI SPACE SpA</p>	<h1>AMS02-PDS</h1>	<p>DOC N°: PDS-RP-CGS-066</p> <p>ISSUE : 1      DATE: 10/11/2008</p> <p>PAGE : 1 of 16</p>
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## INSPECTION REPORT

<p>APPLICABLE DOC. REF.</p> <p>AMS02-PDS PFM Manufacturing and Inspection Plan PDS-PL-CGS-001 is. 1</p>	<p>PROC. REF.</p> <p>N.A.</p>									
<p>ITEM INSPECTED (Name, P/N, S/N) AMS02-PDS PFM Boards – Visual inspection of some boards – MIP.</p>										
<p>REQUIREMENT SATISFIED</p> <p>Manufacturing according to aerospace standards</p>										
<p>INSPECTION (Action/Results)</p> <p><b>DESCRIPTION</b></p> <p>Inspection was performed at Carlo Gavazzi Space premises starting on 10 November 2008 and was carried out on the following boards, detail of the inspected boards were below reported:</p> <ol style="list-style-type: none"> <li>1) Esem 3-A Board Assy p/n:11-AMS02PDS-300.00 s/n:02(pcb s/n:07-034/D) comprised AUX DC/DC Board Assy p/n:11-AMS02PDS-740.00 s/n:07/014/C.</li> <li>2) Esem 3-A Board Assy p/n:11-AMS02PDS-300.00 s/n:05(pcb s/n:07-035/A) comprised AUX DC/DC Board Assy p/n:11-AMS02PDS-740.00 s/n:07-016/G.</li> <li>3) Esem 3-A Board Assy p/n:11-AMS02PDS-300.00 s/n:06(pcb s/n:07-035/B) comprised AUX DC/DC Board Assy p/n:11-AMS02PDS-740.00 s/n:07-015/F.</li> <li>4) Esem 3-A Board Assy p/n:11-AMS02PDS-300.00 s/n:08(pcb s/n:07-035/C) comprised AUX DC/DC Board Assy p/n:11-AMS02PDS-740.00 s/n:07-016/B.</li> <li>5) Esem 3-B Board Assy p/n:11-AMS02PDS-400.00 s/n:02(pcb s/n:07-022/B) comprised AUX DC/DC Board Assy p/n:11-AMS02PDS-740.00 s/n:07-014/G.</li> <li>6) Esem 1-A Board Assy p/n:11-AMS02PDS-600.00 s/n:02(pcb s/n:2641.2) comprised Esem 1-A Piggy Back Assy p/n:11-AMS02PDS-610.00 s/n:07-032/B.</li> <li>7) Power Board 2 Module Assy p/n:11-AMS02PDS-700.00 s/n:02(pcb s/n:07-007/B) comprised: <ul style="list-style-type: none"> <li>• PB2 FPGA Board Assy p/n:11-AMS02PDS-710.00 s/n:07/038/B.</li> <li>• PB2 EMI Filter Board Assy p/n:11-AMS02PDS-720.00 s/n:07/018/G.</li> <li>• PB2 Front Panel Board Assy p/n:11-AMS02PDS-730.00 s/n:07/020/B.</li> <li>• AUX DC/DC Board Assy p/n:11-AMS02PDS-740.00 s/n:07/014/D.</li> </ul> </li> <li>8) Power Board 2 Module Assy p/n:11-AMS02PDS-700.00 s/n:06(pcb s/n:07-009/B) comprised: <ul style="list-style-type: none"> <li>• PB2 FPGA Board Assy p/n:11-AMS02PDS-710.00 s/n:07-038/F.</li> <li>• PB2 EMI Filter Board Assy p/n:11-AMS02PDS-720.00 s/n:07/018/B.</li> <li>• PB2 Front Panel Board Assy p/n:11-AMS02PDS-730.00 s/n:07/020/F.</li> <li>• AUX DC/DC Board Assy p/n:11-AMS02PDS-740.00 s/n:07/016/A.</li> </ul> </li> </ol>										
<table border="0" style="width: 100%;"> <tr> <td style="text-align: center;">Operator</td> <td style="text-align: center;">Quality Assurance</td> <td style="text-align: center;">C.C.</td> </tr> <tr> <td>Signature</td> <td><i>E. FRANCINI</i></td> <td><i>C. CINQUEPALMI</i></td> </tr> <tr> <td>Date</td> <td>10/11/08 <i>[Signature]</i></td> <td><i>C. Cinquepalmi</i> 10/11/08</td> </tr> </table>		Operator	Quality Assurance	C.C.	Signature	<i>E. FRANCINI</i>	<i>C. CINQUEPALMI</i>	Date	10/11/08 <i>[Signature]</i>	<i>C. Cinquepalmi</i> 10/11/08
Operator	Quality Assurance	C.C.								
Signature	<i>E. FRANCINI</i>	<i>C. CINQUEPALMI</i>								
Date	10/11/08 <i>[Signature]</i>	<i>C. Cinquepalmi</i> 10/11/08								

 <p>CARLO GAVAZZI SPACE SpA</p>	<p><b>AMS02-PDS</b></p>	<p>DOC N°: PDS-RP-CGS-066</p> <p>ISSUE : 1      DATE: 10/11/2008</p> <p>PAGE : 2 of 16</p>
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### INSPECTION REPORT

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<p>REQUIREMENT SATISFIED</p> <p>See page 1</p>	
<p>INSPECTION (Action/Results)</p> <p><b><u>HARDWARE REVIEW</u></b></p> <p>1) Esem 3-A Board Assy p/n:11-AMS02PDS-300.00 s/n:02(pcb s/n:07-034/D) comprised AUX DC/DC Board Assy p/n:11-AMS02PDS-740.00 s/n:07/014/C.</p> <p>The following PLVSS (Parts List Variation Sheet) were presented during the inspection:</p> <ul style="list-style-type: none"> <li>• 11-AMS02PDS-300.01 rev A – A1 can be considered closed.</li> <li>• 11-AMS02PDS-300.01 rev A – A2 can be considered closed</li> <li>• 11-AMS02PDS-300.01 rev A – A5 can be considered closed.</li> <li>• 11-AMS02PDS-300.01 rev A – A6 can be considered closed.</li> <li>• 11-AMS02PDS-300.01 rev A – A7 can be considered closed.</li> <li>• 11-AMS02PDS-300.01 rev A – A8 can be considered closed.</li> <li>• 11-AMS02PDS-300.01 rev A – A21 can be considered closed.</li> <li>• 11-AMS02PDS-300.01 rev A – A22 can be considered closed.</li> <li>• 11-AMS02PDS-300.01 rev A – A23 can be considered closed.</li> <li>• 11-AMS02PDS-300.01 rev A – A24 can be considered closed.</li> <li>• 11-AMS02PDS-300.01 rev A – A28 can be considered closed.</li> <li>• 11-AMS02PDS-300.01 rev A – A30 can be considered closed.</li> <li>• 11-AMS02PDS-300.01 rev A – A32 can be considered closed.</li> <li>• 11-AMS02PDS-300.01 rev A – A35 can be considered closed.</li> <li>• 11-AMS02PDS-740.02 rev / – A2 can be considered closed.</li> <li>• 11-AMS02PDS-740.02 rev / – A9 can be considered closed.</li> <li>• 11-AMS02PDS-740.02 rev / – A13 can be considered closed.</li> <li>• 11-AMS02PDS-740.02 rev / – A14 can be considered closed.</li> <li>• 11-AMS02PDS-740.02 rev / – A15 can be considered closed.</li> <li>• 11-AMS02PDS-740.02 rev / – A18 can be considered closed.</li> <li>• 11-AMS02PDS-740.02 rev / – A20 can be considered closed.</li> </ul>	
<p>Operator</p>	<p>Quality Assurance</p>
<p>Signature</p>	<p>E. FRANCHI</p>
<p>Date</p>	<p>10/11/08</p>

C.C.

G. CINQUEPACI

10/11/08



CARLO GAVAZZI

CARLO GAVAZZI SPACE SpA

**AMS02-PDS**

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INSPECTION (Action/Results)

The following NCRs were presented during the inspection:

- NCR-PDS-CGS-C-022(mechanical assembly problems), NCR classified "minor" is closed.
- NCR-PDS-CGS-C-049(rubber silicon sheet missing under U22 component), NCR classified "minor" is closed.
- NCR-PDS-CGS-C-066(D54 missing connection), NCR classified "minor" is closed.
- NCR-PDS-CGS-C-078(voltage supply of U3 not correct), NCR classified "minor" is closed.
- NCR-PDS-CGS-C-082(wrong outlets status), NCR classified "minor" is closed.
- NCR-PDS-CGS-C-084(electrical problem on the Analog Telemetry circuit), NCR classified "minor" is closed.
- NCR-PDS-CGS-C-040(electrical connection missing), NCR classified "minor" is closed.
- NCR-PDS-CGS-C-042(OVC protection improvement), NCR classified "minor" is closed.

The boards have been visually inspected and are ok: no damage, visible clean is ok.

2) Esem 3-A Board Assy p/n:11-AMS02PDS-300.00 s/n:05(pcb s/n:07-035/A) comprised AUX DC/DC Board Assy p/n:11-AMS02PDS-740.00 s/n:07-016/G.

The following PLVs (Parts List Variation Sheet) were presented during the inspection:

- 11-AMS02PDS-300.01 rev A – A1 can be considered closed.
- 11-AMS02PDS-300.01 rev A – A6 can be considered closed.
- 11-AMS02PDS-300.01 rev A – A7 can be considered closed.
- 11-AMS02PDS-300.01 rev A – A8 can be considered closed.
- 11-AMS02PDS-300.01 rev A – A21 can be considered closed.
- 11-AMS02PDS-300.01 rev A – A22 can be considered closed.
- 11-AMS02PDS-300.01 rev A – A23 can be considered closed.
- 11-AMS02PDS-300.01 rev A – A24 can be considered closed.

Operator

Quality Assurance

C.C.

Signature

Date

E. FRANCINI

10/11/08

C. CINQUEPAGNI

10/11/08



CARLO GAVAZZI

CARLO GAVAZZI SPACE SpA

# AMS02-PDS

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INSPECTION (Action/Results)

- 11-AMS02PDS-300.01 rev A – A35 can be considered closed.
- 11-AMS02PDS-300.01 rev A – A38 can be considered closed.
- 11-AMS02PDS-300.01 rev A – A39 can be considered closed.
- 11-AMS02PDS-300.01 rev A – A42 can be considered closed.
- 11-AMS02PDS-740.02 rev / – A2 can be considered closed.
- 11-AMS02PDS-740.02 rev / – A10 can be considered closed.
- 11-AMS02PDS-740.02 rev / – A13 can be considered closed.
- 11-AMS02PDS-740.02 rev / – A15 can be considered closed.
- 11-AMS02PDS-740.02 rev / – A16 can be considered closed.
- 11-AMS02PDS-740.02 rev / – A18 can be considered closed.
- 11-AMS02PDS-740.02 rev / – A21 can be considered closed.

The following NCRs were presented during the inspection:

- NCR-PDS-CGS-C-022(mechanical assembly problems), NCR classified "minor" is closed.
- NCR-PDS-CGS-C-049(rubber silicon sheet missing under U22 component), NCR classified "minor" is closed.
- NCR-PDS-CGS-C-066(D54 missing connection), NCR classified "minor" is closed.
- NCR-PDS-CGS-C-078(voltage supply of U3 not correct), NCR classified "minor" is closed.
- NCR-PDS-CGS-C-082(wrong outlets status), NCR classified "minor" is closed.
- NCR-PDS-CGS-C-084(electrical problem on the Analog Telemetry circuit), NCR classified "minor" is closed.
- NCR-PDS-CGS-C-102(DC-DC\_SYNCH\_OUT signal non correct level), NCR classified "minor" is closed.
- NCR-PDS-CGS-C-107(current telemetry outlet incorrect), NCR classified "minor" is closed.
- NCR-PDS-CGS-C-040(electrical connection missing on pcb), NCR classified "minor" is closed.
- NCR-PDS-CGS-C-042(OVC protection improvement), NCR classified "minor" is closed.

The boards have been visually inspected and are ok: no damage, visible clean is ok.

Operator

Quality Assurance

C.C.

Signature


Date

E. FRANCINI

10/11/08


C. CINQUEPACI

10/11/08

 <b>CARLO GAVAZZI</b>  CARLO GAVAZZI SPACE SpA	<h1>AMS02-PDS</h1>	DOC N°: PDS-RP-CGS-066  ISSUE : 1      DATE: 10/11/2008  PAGE : 5 of 16
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<p>INSPECTION (Action/Results)</p> <p>3) Esem 3-A Board Assy p/n:11-AMS02PDS-300.00 s/n:06(pcb s/n:07-035/B) comprised AUX DC/DC Board Assy p/n:11-AMS02PDS-740.00 s/n:07-015/F.</p> <p>The following PLVss (Parts List Variation Sheet) were presented during the inspection:</p> <ul style="list-style-type: none"> <li>• 11-AMS02PDS-300.01 rev A – A1 can be considered closed.</li> <li>• 11-AMS02PDS-300.01 rev A – A6 can be considered closed</li> <li>• 11-AMS02PDS-300.01 rev A – A7 can be considered closed.</li> <li>• 11-AMS02PDS-300.01 rev A – A8 can be considered closed.</li> <li>• 11-AMS02PDS-300.01 rev A – A21 can be considered closed.</li> <li>• 11-AMS02PDS-300.01 rev A – A22 can be considered closed.</li> <li>• 11-AMS02PDS-300.01 rev A – A23 can be considered closed.</li> <li>• 11-AMS02PDS-300.01 rev A – A24 can be considered closed.</li> <li>• 11-AMS02PDS-300.01 rev A – A35 can be considered closed.</li> <li>• 11-AMS02PDS-300.01 rev A – A38 can be considered closed.</li> <li>• 11-AMS02PDS-300.01 rev A – A39 can be considered closed.</li> <li>• 11-AMS02PDS-300.01 rev A – A40 can be considered closed.</li> <li>• 11-AMS02PDS-300.01 rev A – A43 can be considered closed.</li> <li>• 11-AMS02PDS-740.02 rev / – A2 can be considered closed.</li> <li>• 11-AMS02PDS-740.02 rev / – A3 can be considered closed.</li> <li>• 11-AMS02PDS-740.02 rev / – A13 can be considered closed.</li> <li>• 11-AMS02PDS-740.02 rev / – A15 can be considered closed.</li> <li>• 11-AMS02PDS-740.02 rev / – A16 can be considered closed.</li> <li>• 11-AMS02PDS-740.02 rev / – A18 can be considered closed.</li> <li>• 11-AMS02PDS-740.02 rev / – A21 can be considered closed.</li> </ul>	
Operator	Quality Assurance      C.C.
Signature  Date	<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;"> <i>E. FRANCHI</i>  <i>10/11/08</i> </div> <div style="text-align: center;"> <i>C. CINQUEPACCHI</i>  <i>10/11/08</i> </div> </div>

 <p>CARLO GAVAZZI</p> <p>CARLO GAVAZZI SPACE SpA</p>	<p><b>AMS02-PDS</b></p>	<p>DOC N°: PDS-RP-CGS-066</p> <p>ISSUE : 1      DATE: 10/11/2008</p> <p>PAGE : 6 of 16</p>
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<p>REQUIREMENT SATISFIED</p> <p>See page 1</p>	
<p>INSPECTION (Action/Results)</p> <p>The following NCRs were presented during the inspection:</p> <ul style="list-style-type: none"> <li>• NCR-PDS-CGS-C-022(mechanical assembly problems), NCR classified "minor" is closed.</li> <li>• NCR-PDS-CGS-C-049(rubber silicon sheet missing under U22 component), NCR classified "minor" is closed.</li> <li>• NCR-PDS-CGS-C-066(D54 missing connection), NCR classified "minor" is closed.</li> <li>• NCR-PDS-CGS-C-078(voltage supply of U3 not correct), NCR classified "minor" is closed.</li> <li>• NCR-PDS-CGS-C-082(wrong outlets status), NCR classified "minor" is closed.</li> <li>• NCR-PDS-CGS-C-084(electrical problem on the Analog Telemetry circuit), NCR classified "minor" is closed.</li> <li>• NCR-PDS-CGS-C-103(wrong outlet 7 status), NCR classified "minor" is closed.</li> <li>• NCR-PDS-CGS-C-104(wrong outlet 1 and 4 status), NCR classified "minor" is closed.</li> <li>• NCR-PDS-CGS-C-115(wrong outlet 4 status), NCR classified "minor" is closed.</li> <li>• NCR-PDS-CGS-C-040(electrical connection missing on pcb), NCR classified "minor" is closed.</li> <li>• NCR-PDS-CGS-C-042(OVC protection improvement), NCR classified "minor" is closed.</li> </ul> <p>The boards have been visually inspected and are ok: no damage, visible clean is ok.</p> <p>4) Esem 3-A Board Assy p/n:11-AMS02PDS-300.00 s/n:08(pcb s/n:07/035/C) comprised AUX DC/DC Board Assy p/n:11-AMS02PDS-740.00 s/n:07-016/B.</p> <p>The following PLVs (Parts List Variation Sheet) were presented during the inspection:</p> <ul style="list-style-type: none"> <li>• 11-AMS02PDS-300.01 rev A – A1 can be considered closed.</li> <li>• 11-AMS02PDS-300.01 rev A – A3 can be considered closed.</li> <li>• 11-AMS02PDS-300.01 rev A – A6 can be considered closed.</li> <li>• 11-AMS02PDS-300.01 rev A – A7 can be considered closed.</li> <li>• 11-AMS02PDS-300.01 rev A – A8 can be considered closed.</li> <li>• 11-AMS02PDS-300.01 rev A – A21 can be considered closed.</li> <li>• 11-AMS02PDS-300.01 rev A – A22 can be considered closed.</li> </ul>	
Operator	Quality Assurance      C.C.
Signature	E. FRANCINI      C. CINQUEPACCHI
Date	10/11/08      10/11/08



CARLO GAVAZZI

CARLO GAVAZZI SPACE SpA

**AMS02-PDS**

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INSPECTION (Action/Results)

- 11-AMS02PDS-300.01 rev A – A23 can be considered closed.
- 11-AMS02PDS-300.01 rev A – A24 can be considered closed.
- 11-AMS02PDS-300.01 rev A – A35 can be considered closed.
- 11-AMS02PDS-300.01 rev A – A41 can be considered closed.
- 11-AMS02PDS-300.01 rev A – A43 can be considered closed.
- 11-AMS02PDS-300.01 rev A – A44 can be considered closed.
- 11-AMS02PDS-740.02 rev / – A2 can be considered closed.
- 11-AMS02PDS-740.02 rev / – A5 can be considered closed.
- 11-AMS02PDS-740.02 rev / – A13 can be considered closed.
- 11-AMS02PDS-740.02 rev / – A15 can be considered closed.
- 11-AMS02PDS-740.02 rev / – A16 can be considered closed.
- 11-AMS02PDS-740.02 rev / – A17 can be considered closed.
- 11-AMS02PDS-740.02 rev / – A21 can be considered closed.

The following NCRs were presented during the inspection:

- NCR-PDS-CGS-C-022(mechanical assembly problems), NCR classified "minor" is closed.
- NCR-PDS-CGS-C-049(rubber silicon sheet missing under U22 component), NCR classified "minor" is closed.
- NCR-PDS-CGS-C-066(D54 missing connection), NCR classified "minor" is closed.
- NCR-PDS-CGS-C-078(voltage supply of U3 not correct), NCR classified "minor" is closed.
- NCR-PDS-CGS-C-082(wrong outlets status), NCR classified "minor" is closed.
- NCR-PDS-CGS-C-084(electrical problem on the Analog Telemetry circuit), NCR classified "minor" is closed.
- NCR-PDS-CGS-C-040(electrical connection missing on pcb), NCR classified "minor" is closed.
- NCR-PDS-CGS-C-042(OVC protection improvement), NCR classified "minor" is closed.

The boards have been visually inspected and are ok; no damage, visible clean is ok.

Operator

Quality Assurance

C.C.

Signature

Date

E. FRANCINI

10/11/08

C. CIRQUERAMI  
10/11/08

CARLO GAVAZZI

CARLO GAVAZZI SPACE SpA

**AMS02-PDS**

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INSPECTION (Action/Results)

5) Esem 3-B Board Assy p/n:11-AMS02PDS-400.00 s/n:02(pcb s/n:07-022/B) comprised AUX DC/DC Board Assy p/n:11-AMS02PDS-740.00 s/n:07-014/G.

The following PLVSs (Parts List Variation Sheet) were presented during the inspection:

- 11-AMS02PDS-400.01 rev A – A1 can be considered closed.
- 11-AMS02PDS-400.01 rev A – A2 can be considered closed.
- 11-AMS02PDS-400.01 rev A – A3 can be considered closed.
- 11-AMS02PDS-400.01 rev A – A4 can be considered closed.
- 11-AMS02PDS-400.01 rev A – A5 can be considered closed.
- 11-AMS02PDS-400.01 rev A – A9 can be considered closed.
- 11-AMS02PDS-400.01 rev A – A10 can be considered closed.
- 11-AMS02PDS-400.01 rev A – A11 can be considered closed.
- 11-AMS02PDS-400.01 rev A – A12 can be considered closed.
- 11-AMS02PDS-400.01 rev A – A13 can be considered closed.
- 11-AMS02PDS-400.01 rev A – A15 can be considered closed.
- 11-AMS02PDS-400.01 rev A – A16 can be considered closed.
- 11-AMS02PDS-740.02 rev / – A1 can be considered closed.
- 11-AMS02PDS-740.02 rev / – A7 can be considered closed.
- 11-AMS02PDS-740.02 rev / – A13 can be considered closed.
- 11-AMS02PDS-740.02 rev / – A15 can be considered closed.
- 11-AMS02PDS-740.02 rev / – A16 can be considered closed.
- 11-AMS02PDS-740.02 rev / – A17 can be considered closed.
- 11-AMS02PDS-740.02 rev / – A22 can be considered closed.

Operator

Quality Assurance

C.C.


Signature

Date

E. FRANCINI


10/11/08

C. CINQUELANI  
10/11/08

 <p>CARLO GAVAZZI</p> <p>CARLO GAVAZZI SPACE SpA</p>	<h1>AMS02-PDS</h1>	<p>DOC N°: PDS-RP-CGS-066</p> <p>ISSUE : 1      DATE: 10/11/2008</p> <p>PAGE : 9 of 16</p>
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<p>REQUIREMENT SATISFIED</p> <p>See page 1</p>	
<p>INSPECTION (Action/Results)</p> <p>The following NCRs were presented during the inspection:</p> <ul style="list-style-type: none"> <li>NCR-PDS-CGS-C-020(electronic components assembly problems), NCR classified "minor" is closed.</li> <li>NCR-PDS-CGS-C-085(signal I/F problem), NCR classified "minor" is closed.</li> <li>NCR-PDS-CGS-C-108(U12 comparator hysteresis problem), NCR classified "minor" is closed.</li> <li>NCR-PDS-CGS-C-109(outlets status filtering problem), NCR classified "minor" is closed.</li> <li>NCR-PDS-CGS-C-110(outlet 4 status malfunctioning), NCR classified "minor" is closed.</li> <li>NCR-PDS-CGS-C-041(electrical connection missing on pcb), NCR classified "minor" is closed.</li> <li>NCR-PDS-CGS-C-043(OVC protection improvement), NCR classified "minor" is closed.</li> </ul> <p>The boards have been visually inspected and are ok: no damage, visible clean is ok.</p> <p>6) Esem 1-A Board Assy p/n:11-AMS02PDS-600.00 s/n:02(pcb s/n:2641.2) comprised Esem 1-A Piggy Back Assy p/n:11-AMS02PDS-610.00 s/n:07-032/B.</p> <p>The following PLVs (Parts List Variation Sheet) were presented during the inspection:</p> <ul style="list-style-type: none"> <li>11-AMS02PDS-600.01 rev A – A1 can be considered closed.</li> <li>11-AMS02PDS-600.01 rev A – A2 can be considered closed.</li> <li>11-AMS02PDS-600.01 rev A – A3 can be considered closed.</li> <li>11-AMS02PDS-600.01 rev A – A6 can be considered closed.</li> <li>11-AMS02PDS-600.01 rev A – A8 can be considered closed.</li> <li>11-AMS02PDS-600.01 rev A – A9 can be considered closed.</li> <li>11-AMS02PDS-610.01 rev A – A1 can be considered closed.</li> <li>11-AMS02PDS-610.01 rev A – A2 can be considered closed.</li> <li>11-AMS02PDS-610.01 rev A – A3 can be considered closed.</li> <li>11-AMS02PDS-610.01 rev A – A4 can be considered closed.</li> <li>11-AMS02PDS-610.01 rev A – A5 can be considered closed.</li> <li>11-AMS02PDS-610.01 rev A – A8 can be considered closed.</li> <li>11-AMS02PDS-610.01 rev A – A9 can be considered closed.</li> </ul>	
Operator	Quality Assurance
Signature	<div style="display: flex; justify-content: space-between;"> <div> <p>E. FRANCINI</p> <p>10/11/08</p> </div> <div> <p>C. CINQUEPACI</p> <p>10/11/08</p> </div> </div>
Date	

 <p>CARLO GAVAZZI</p> <p>CARLO GAVAZZI SPACE SpA</p>	<h1>AMS02-PDS</h1>	<p>DOC N°: PDS-RP-CGS-066</p> <p>ISSUE : 1      DATE: 10/11/2008</p> <p>PAGE : 10 of 16</p>
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<p>INSPECTION (Action/Results)</p> <ul style="list-style-type: none"> <li>• 11-AMS02PDS-610.01 rev A – A10 can be considered closed.</li> <li>• 11-AMS02PDS-610.01 rev A – A18 can be considered closed.</li> <li>• 11-AMS02PDS-610.01 rev A – A19 can be considered closed.</li> <li>• 11-AMS02PDS-610.01 rev A – A20 can be considered closed.</li> <li>• 11-AMS02PDS-610.01 rev A – A21 can be considered closed.</li> <li>• 11-AMS02PDS-610.01 rev A – A22 can be considered closed.</li> <li>• 11-AMS02PDS-610.01 rev A – A23 can be considered closed.</li> <li>• 11-AMS02PDS-610.01 rev A – A24 can be considered closed.</li> <li>• 11-AMS02PDS-610.01 rev A – A25 can be considered closed.</li> </ul> <p>The following NCRs were presented during the inspection:</p> <ul style="list-style-type: none"> <li>• NCR-PDS-CGS-C-002(electronic components assembly problems), NCR classified "minor" is closed.</li> <li>• NCR-PDS-CGS-C-025(electrical problem on Esem 1-A power cells controllers), NCR classified "minor" is closed.</li> <li>• NCR-PDS-CGS-C-027(over voltage protection missing), NCR classified "minor" is closed.</li> <li>• NCR-PDS-CGS-C-037(assembly of inductances not clear), NCR classified "minor" is closed.</li> <li>• NCR-PDS-CGS-C-059(output voltage wrong value), NCR classified "minor" is closed.</li> <li>• NCR-PDS-CGS-C-061(damaged pad and pcb), NCR classified "minor" is closed.</li> <li>• NCR-PDS-CGS-C-073(short circuit between "sec_pwr_line" signal and mechanical upper frame), NCR classified "minor" is closed.</li> <li>• NCR-PDS-CGS-C-095(power cell DC_DC_1 does not work), NCR classified "minor" is closed.</li> <li>• NCR-PDS-CGS-C-068(over voltage protection missing connection), NCR classified "minor" is closed.</li> </ul>	
<p style="text-align: center;">Operator</p> <p>Signature</p> <p>Date</p>	<p style="text-align: center;">Quality Assurance</p> <p style="text-align: center;">C.C.</p> <p style="text-align: center;">E. FRANCHI 10/11/08 C.G.S.</p> <p style="text-align: center;">C-CINQUEPACI 10/11/08</p>

 <p>CARLO GAVAZZI</p> <p>CARLO GAVAZZI SPACE SpA</p>	<p><b>AMS02-PDS</b></p>	<p>DOC N°: PDS-RP-CGS-066</p> <p>ISSUE : 1      DATE: 10/11/2008</p> <p>PAGE : 11 of 16</p>
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<p>REQUIREMENT SATISFIED</p> <p>See page 1</p>	
<p>INSPECTION (Action/Results)</p> <ul style="list-style-type: none"> <li>NCR-PDS-CGS-C-083(pull down for signal I/F), NCR classified "minor" is closed.</li> <li>NCR-PDS-CGS-C-119(ESEM 1-A Piggy telemetries MUX malfunction), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: apply the conformal coating on the rework area, perform a visual inspection of the previous rework.</li> <li>NCR-PDS-CGS-C-122(ESEM 1-A Piggy MUX power supply malfunction), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: apply the conformal coating on the rework area, perform a visual inspection of the previous rework.</li> <li>NCR-PDS-CGS-C-124(over voltage protection problem), NCR classified "minor" is closed.</li> </ul> <p>The boards have been visually inspected and are ok: no damage, visible clean is ok.</p> <p>7) Power Board 2 Module Assy p/n:11-AMS02PDS-700.00 s/n:02(pcb s/n:07-007/B) comprised:</p> <ul style="list-style-type: none"> <li>PB2 FPGA Board Assy p/n:11-AMS02PDS-710.00 s/n:07/038/B.</li> <li>PB2 EMI Filter Board Assy p/n:11-AMS02PDS-720.00 s/n:07/018/G.</li> <li>PB2 Front Panel Board Assy p/n:11-AMS02PDS-730.00 s/n:07/020/B.</li> <li>AUX DC/DC Board Assy p/n:11-AMS02PDS-740.00 s/n:07/014/D.</li> </ul> <p>The following PLVSs (Parts List Variation Sheet) were presented during the inspection:</p> <ul style="list-style-type: none"> <li>11-AMS02PDS-700.01 rev / - A1 can be considered closed.</li> <li>11-AMS02PDS-700.01 rev / - A2 can be considered closed.</li> <li>11-AMS02PDS-700.01 rev / - A3 can be considered closed.</li> <li>11-AMS02PDS-700.01 rev / - A4 can be considered closed.</li> <li>11-AMS02PDS-700.01 rev / - A5 can be considered closed.</li> <li>11-AMS02PDS-700.01 rev / - A12 can be considered closed.</li> <li>11-AMS02PDS-700.01 rev / - A13 can be considered closed.</li> <li>11-AMS02PDS-700.01 rev / - A15 can be considered closed.</li> <li>11-AMS02PDS-700.01 rev / - A17 can be considered closed.</li> <li>11-AMS02PDS-700.01 rev / - A19 can be considered closed.</li> <li>11-AMS02PDS-700.01 rev / - A21 can be considered closed.</li> </ul>	
<p>Operator</p>	<p>Quality Assurance</p>
<p>Signature</p>	<p>E. FRANCINI</p>
<p>Date</p>	<p>10/11/08</p>
<p>C.C.</p> <p>C. C. INSQUERAMI</p> <p>10/11/08</p>	

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INSPECTION (Action/Results) <ul style="list-style-type: none"> <li>11-AMS02PDS-710.01 rev A – A1 can be considered closed.</li> <li>11-AMS02PDS-710.01 rev A – A2 can be considered closed.</li> <li>11-AMS02PDS-710.01 rev A – A4 can be considered closed.</li> <li>11-AMS02PDS-710.01 rev A – A6 can be considered closed.</li> <li>11-AMS02PDS-720.01 rev A – A1 can be considered closed.</li> <li>11-AMS02PDS-720.01 rev A – A2 can be considered closed.</li> <li>11-AMS02PDS-730.01 rev A – A1 can be considered closed.</li> <li>11-AMS02PDS-730.01 rev A – A2 can be considered closed.</li> <li>11-AMS02PDS-730.01 rev A – A3 can be considered closed.</li> <li>11-AMS02PDS-730.01 rev A – A4 can be considered closed.</li> <li>11-AMS02PDS-740.01 rev / – A1 can be considered closed.</li> <li>11-AMS02PDS-740.01 rev / – A2 can be considered closed.</li> <li>11-AMS02PDS-740.01 rev / – A3 can be considered closed.</li> <li>11-AMS02PDS-740.01 rev / – A4 can be considered closed.</li> <li>11-AMS02PDS-740.01 rev / – A5 can be considered closed.</li> <li>11-AMS02PDS-740.01 rev / – A12 can be considered closed.</li> <li>11-AMS02PDS-740.01 rev / – A15 can be considered closed.</li> <li>11-AMS02PDS-740.01 rev / – A17 can be considered closed.</li> <li>11-AMS02PDS-740.01 rev / – A18 can be considered closed.</li> </ul> <p>The following NCRs were presented during the inspection:</p> <ul style="list-style-type: none"> <li>NCR-PDS-CGS-C-004(electronic components assembly problems), NCR classified "minor" is closed.</li> <li>NCR-PDS-CGS-C-029(PB2 outlet lines design improvement), NCR classified "minor" is closed.</li> <li>NCR-PDS-CGS-C-048(PB2 board bracket conductance optimization), NCR classified "minor" is closed.</li> </ul>	
Operator	Quality Assurance      C.C.
Signature	E. FRANCHI <i>[Signature]</i>
Date	10/11/08 <i>[Signature]</i>

 <p>CARLO GAVAZZI SPACE SpA</p>	<h1>AMS02-PDS</h1>	<p>DOC N°: PDS-RP-CGS-066</p> <p>ISSUE : 1      DATE: 10/11/2008</p> <p>PAGE : 13 of 16</p>
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<p>INSPECTION (Action/Results)</p> <ul style="list-style-type: none"> <li>NCR-PDS-CGS-C-053(PB2 excessive consumption on the auxiliary 15V supply), NCR classified "minor" is closed.</li> <li>NCR-PDS-CGS-C-088(PB2 and PB2 FPGA boards temperature telemetry trimming), NCR classified "minor" is closed.</li> <li>NCR-PDS-CGS-C-081(PB2 FPGA pull up for signal I/F), NCR classified "minor" is closed.</li> <li>NCR-PDS-CGS-C-101(PB2 FPGA Strobe signal shape problem), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: apply the conformal coating on the rework area, perform a visual inspection of the previous rework.</li> <li>NCR-PDS-CGS-C-012(electronic components assembly problems), NCR classified "minor" is closed.</li> <li>NCR-PDS-CGS-C-039(pcb connection missing), NCR classified "minor" is closed.</li> <li>NCR-PDS-CGS-C-044(over voltage current protection improvement), NCR classified "minor" is closed.</li> </ul> <p>The boards have been visually inspected and are ok: no damage, visible clean is ok.</p> <p>8) Power Board 2 Module Assy p/n:11-AMS02PDS-700.00 s/n:06(pcb s/n:07-009/B) comprised:</p> <ul style="list-style-type: none"> <li>PB2 FPGA Board Assy p/n:11-AMS02PDS-710.00 s/n:07-038/F.</li> <li>PB2 EMI Filter Board Assy p/n:11-AMS02PDS-720.00 s/n:07/018/B.</li> <li>PB2 Front Panel Board Assy p/n:11-AMS02PDS-730.00 s/n:07/020/F.</li> <li>AUX DC/DC Board Assy p/n:11-AMS02PDS-740.00 s/n:07/016/A.</li> </ul> <p>The following PLVs (Parts List Variation Sheet) were presented during the inspection:</p> <ul style="list-style-type: none"> <li>11-AMS02PDS-700.01 rev / - A1 can be considered closed.</li> <li>11-AMS02PDS-700.01 rev / - A2 can be considered closed.</li> <li>11-AMS02PDS-700.01 rev / - A3 can be considered closed.</li> <li>11-AMS02PDS-700.01 rev / - A4 can be considered closed.</li> </ul>	
<p>Operator</p> <p>Signature</p> <p>Date</p>	<p>Quality Assurance</p> <p>C.C.</p> <p><i>E. FRANCINI</i></p> <p><i>10/11/08</i></p> <p><i>C. CINQUEPACI</i></p> <p><i>10/11/08</i></p>

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<p>INSPECTION (Action/Results)</p> <ul style="list-style-type: none"> <li>• 11-AMS02PDS-700.01 rev / – A12 can be considered closed.</li> <li>• 11-AMS02PDS-700.01 rev / – A16 can be considered closed.</li> <li>• 11-AMS02PDS-700.01 rev / – A19 can be considered closed.</li> <li>• 11-AMS02PDS-700.01 rev / – A20 can be considered closed.</li> <li>• 11-AMS02PDS-710.01 rev A – A1 can be considered closed.</li> <li>• 11-AMS02PDS-710.01 rev A – A2 can be considered closed.</li> <li>• 11-AMS02PDS-710.01 rev A – A3 can be considered closed.</li> <li>• 11-AMS02PDS-710.01 rev A – A6 can be considered closed.</li> <li>• 11-AMS02PDS-710.01 rev A – A13 can be considered closed.</li> <li>• 11-AMS02PDS-720.01 rev A – A1 can be considered closed.</li> <li>• 11-AMS02PDS-720.01 rev A – A2 can be considered closed.</li> <li>• 11-AMS02PDS-730.01 rev A – A1 can be considered closed.</li> <li>• 11-AMS02PDS-730.01 rev A – A2 can be considered closed.</li> <li>• 11-AMS02PDS-730.01 rev A – A4 can be considered closed.</li> <li>• 11-AMS02PDS-740.01 rev / – A1 can be considered closed.</li> <li>• 11-AMS02PDS-740.01 rev / – A2 can be considered closed.</li> <li>• 11-AMS02PDS-740.01 rev / – A3 can be considered closed.</li> <li>• 11-AMS02PDS-740.01 rev / – A4 can be considered closed.</li> <li>• 11-AMS02PDS-740.01 rev / – A12 can be considered closed.</li> <li>• 11-AMS02PDS-740.01 rev / – A14 can be considered closed.</li> <li>• 11-AMS02PDS-740.01 rev / – A15 can be considered closed.</li> <li>• 11-AMS02PDS-740.01 rev / – A18 can be considered closed.</li> <li>• 11-AMS02PDS-740.01 rev / – A22 can be considered closed.</li> </ul>	
<p>Operator</p> <p>Signature</p> <p>Date</p>	<p>Quality Assurance</p> <p>C.C.</p> <p>E. FRANCHINI</p> <p>10/11/08</p> <p>C. CINQUEFALCHI</p> <p>10/11/08</p>

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REQUIREMENT SATISFIED See page 1										
INSPECTION (Action/Results) <p>The following NCRs were presented during the inspection:</p> <ul style="list-style-type: none"> <li>• NCR-PDS-CGS-C-008(electronic components assembly problems), NCR classified "minor" is closed.</li> <li>• NCR-PDS-CGS-C-033(PB2 outlet lines design improvement), NCR classified "minor" is closed.</li> <li>• NCR-PDS-CGS-C-048(PB2 board bracket conductance optimization), NCR classified "minor" is closed.</li> <li>• NCR-PDS-CGS-C-086(pull down MUX problem), NCR classified "minor" is closed.</li> <li>• NCR-PDS-CGS-C-101(PB2 FPGA Strobe signal shape problem), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: apply the conformal coating on the rework area, perform a visual inspection of the previous rework.</li> <li>• NCR-PDS-CGS-C-016(electronic components assembly problems), NCR classified "minor" is closed.</li> <li>• NCR-PDS-CGS-C-039(electrical connection missing), NCR classified "minor" is closed.</li> <li>• NCR-PDS-CGS-C-044(OVC protection improvement), NCR classified "minor" is closed.</li> </ul> <p>The boards have been visually inspected and are ok: no damage, visible clean is ok.</p>										
<h3><u>CONCLUSION</u></h3> <p>As it can be evinced by the results of the visual inspection reported on previous section (HARDWARE REVIEW), no discrepancies able to impact the next foreseen activities, have been highlighted.</p> <p>All solder joints are of adequate quality, the soldering process complies to ECSS-Q-70-08A and ECSS-Q-70-38A, all modifications are performed according to ECSS-Q-70-28A.</p> <p>The open points are here listed :</p> <p>1) NCR-PDS-CGS-C-119(ESEM 1-A Piggy telemetries MUX malfunction), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: apply the conformal coating on the rework area, perform a visual inspection of the previous rework</p>										
<table border="1" style="width: 100%;"> <tr> <th style="width: 40%;">Operator</th> <th style="width: 40%;">Quality Assurance</th> <th style="width: 20%;">G.C.</th> </tr> <tr> <td>Signature</td> <td>E. FRANCHI</td> <td>E. CARRUCCI</td> </tr> <tr> <td>Date</td> <td>10/11/08</td> <td>10/11/08</td> </tr> </table>		Operator	Quality Assurance	G.C.	Signature	E. FRANCHI	E. CARRUCCI	Date	10/11/08	10/11/08
Operator	Quality Assurance	G.C.								
Signature	E. FRANCHI	E. CARRUCCI								
Date	10/11/08	10/11/08								

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<b>REQUIREMENT SATISFIED</b> See page 1							
<b>INSPECTION (Action/Results)</b> <p>2) NCR-PDS-CGS-C-122(ESEM 1-A Piggy MUX power supply malfunction), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: apply the conformal coating on the rework area, perform a visual inspection of the previous rework</p> <p>3) NCR-PDS-CGS-C-101(PB2 FPGA Strobe signal shape problem), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: apply the conformal coating on the rework area, perform a visual inspection of the previous rework.</p> <p>From the H/W point of view the inspected boards can be used to proceed with the next activities:</p> <ul style="list-style-type: none"> <li>- Closing of NCR-PDS-CGS-C-119, NCR-PDS-CGS-C-122, NCR-PDS-CGS-C-101.</li> <li>- Gluing of some components and threaded hardware parts.</li> <li>- Conformal coating.</li> </ul>							
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; text-align: center;">Operator</td> <td style="width: 33%; text-align: center;">Quality Assurance</td> <td style="width: 33%; text-align: center;">C.C.</td> </tr> <tr> <td style="height: 40px; vertical-align: bottom;">           Signature            Date         </td> <td style="vertical-align: bottom;">           E. FRANCINI            10/11/08         </td> <td style="vertical-align: bottom;">           E. C. W. R. J. A. G.            10/11/08         </td> </tr> </table>		Operator	Quality Assurance	C.C.	Signature Date	E. FRANCINI 10/11/08	E. C. W. R. J. A. G. 10/11/08
Operator	Quality Assurance	C.C.					
Signature Date	E. FRANCINI 10/11/08	E. C. W. R. J. A. G. 10/11/08					